

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: The engines and emission control systems produced by the manufacturer as described below are certified for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

Model Year	Engine Family	Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation
2025	SDZXL07.8051	Diesel	Dedicated	Diesel	Variable-speed and Constant-speed

Emission Control Systems	Special Features
[1]: Direct Diesel Injection (DDI), Turbocharger (TC), Charge Air Cooler (CAC), Electronic Control Module (ECM), Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC), Continuous Trap Oxidizer (CTOX), Selective Catalytic Reduction-Urea (SCR-U), Ammonia Oxidation Catalyst (AMOX)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kW-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

Applicable Standard		Criteria				Smoke Opacity		
		NMHC	NOx	CO	PM	ACL	LUG	PEAK
Tier 4 Final 130 ≤ kW ≤ 560	STD	0.19	0.40	3.5	0.02	*	*	*
	FEL	*	*	*	*	*	*	*
	NTE	0.28	0.60	4.4	0.03	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this 27th day of September 2024.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: SDZXL07.8051 EO Number: U-R-013-0751 Date Applicable: 9/9/2024

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	hp	rpm	lb/hr	N-m	rpm	lb/hr	-	-	-
TCD 7.8 L6	CFVI250		L6	7.755	335.2	2200	117.3	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI170		L6	7.755	227.9	1800	75.5	1050	1450	70.6	1	N/A	
TCD 7.8 L6	CFVI180A		L6	7.755	241.3	2200	85.7	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CFVI170A		L6	7.755	227.9	2000	77.9	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CFVI180		L6	7.755	241.3	1900	81.6	1050	1450	70.6	1	N/A	
TCD 7.8 L6	CFVI165		L6	7.755	221.2	1900	76.6	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CFVI175		L6	7.755	234.6	2100	81.8	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CFVI190		L6	7.755	254.7	1800	84.5	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CFVI200		L6	7.755	268.2	2200	94.5	1050	1450	70.6	1	N/A	
TCD 7.8 L6	CSVI250A		L6	7.755	335.2	2100	117.5	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI190A		L6	7.755	254.7	2000	86.6	1050	1450	70.6	1	N/A	
TCD 7.8 L6	CSVI245		L6	7.755	328.5	2000	111.3	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI225A		L6	7.755	301.7	2100	102.8	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CFVI225		L6	7.755	301.7	2200	105.5	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CFVI230A		L6	7.755	308.4	2000	103.9	1330	1450	88.9	1	N/A	
TCD 7.8 L6	CFVI245		L6	7.755	328.5	2000	111.3	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CSVI230		L6	7.755	308.4	1800	103.7	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI220		L6	7.755	295	2000	99.3	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CFVI240A		L6	7.755	321.8	2200	112.1	1330	1450	88.9	1	N/A	
TCD 7.8 L6	CFVI170S		L6	7.755	227.9	2300	84.3	1304	1450	89.4	1	N/A	
TCD 7.8 L6	CSVI250		L6	7.755	335.2	2200	117.3	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CSVI240A		L6	7.755	321.8	2200	112.1	1330	1450	88.9	1	N/A	
TCD 7.8 L6	CFVI230C		L6	7.755	308.4	1800	103.7	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI240		L6	7.755	321.8	1900	105.7	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI260		L6	7.755	348.6	2200	123.1	1390	1450	94.7	1	N/A	
TCD 7.8 L6	CSVI240		L6	7.755	321.8	1900	105.7	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI230		L6	7.755	308.4	1800	103.7	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI250A		L6	7.755	335.2	2100	117.5	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CFVI215		L6	7.755	288.3	1900	96.8	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CFVI160		L6	7.755	214.5	1800	71.9	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CFVI210		L6	7.755	281.6	1800	90.5	1330	1450	88.9	1	N/A	
TCD 7.8 L6	CSVI170S		L6	7.755	227.9	2300	84.3	1304	1450	89.4	1	N/A	
TCD 7.8 L6	CSVI230C		L6	7.755	308.4	1800	103.7	1400	1450	95.7	1	N/A	
TCD 7.8 L6	CSVI165		L6	7.755	221.2	1900	76.6	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CSVI200		L6	7.755	268.2	2200	94.5	1050	1450	70.6	1	N/A	
TCD 7.8 L6	CSVI210		L6	7.755	281.6	1800	90.5	1330	1450	88.9	1	N/A	
TCD 7.8 L6	CSVI175		L6	7.755	234.6	2100	81.8	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CSVI160		L6	7.755	214.5	1800	71.9	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CSVI190		L6	7.755	254.7	1800	84.5	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CSVI170A		L6	7.755	227.9	2000	77.9	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CSVI180		L6	7.755	241.3	1900	81.6	1050	1450	70.6	1	N/A	
TCD 7.8 L6	CSVI260		L6	7.755	348.6	2200	123.1	1390	1450	94.7	1	N/A	

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					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	hp	rpm	lb/hr	N-m	rpm	lb/hr	-	-	-
TCD 7.8 L6	CSV1190A		L6	7.755	254.7	2000	86.6	1050	1450	70.6	1	N/A	
TCD 7.8 L6	CSV1225A		L6	7.755	301.7	2100	102.8	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CSV1215		L6	7.755	288.3	1900	96.8	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CSV1225		L6	7.755	301.7	2200	105.5	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CSV1220		L6	7.755	295	2000	99.3	1260	1450	84.6	1	N/A	
TCD 7.8 L6	CSV1180A		L6	7.755	241.3	2200	85.7	1000	1450	68.1	1	N/A	
TCD 7.8 L6	CSV1230A		L6	7.755	308.4	2000	103.9	1330	1450	88.9	1	N/A	
TCD 7.8 L6	CSV1170		L6	7.755	227.9	1800	75.5	1050	1450	70.6	1	N/A	